

Air-conditioner Control System TOUCH CONTROLLER

MODEL

TC-24A

INSTRUCTION BOOK



Before using the controller, read this Instruction Book carefully to ensure proper operation.

Retain this Instruction Book for future reference.



Make sure that this manual, Installation Manual, and Initial Setting Manual are passed on to any future air condition system users.

To ensure safety and proper operation of the unit, the unit should only be installed by qualified personnel.

Safety Precautions	2
Function List	4
Names and Functions of Controller Components	8
Screen Configuration [HOME screen]	10
Buttons [HOME screen]	12
Icon Displays [HOME screen]	14
Basic Operations	18
Screen selection	18
Group selection	19
Operating the Air conditioning unit group	20
ON/OFF operation	20
Mode	20
Temperature setting	21
Interlocked ventilation units(LOSSNAY)/Fan speed/Air direction/Louver settings	23
Hold Function Setting	24
Operating the LOSSNAY group	24
Mode	24
Fan speed setting	24
Operating the General equipment group	24
ON/OFF operation	24
Multiple group selection screen	25
Disabling functions	25
Menu Screen [Button Settings]	26
Usage - Main Menu Settings	28
1 Time and Schedule screen	28
2 Restrictions Settings	36
3 Control Panel	42
4 System Management	50
Maintenance	54
Touch Panel Cleaning screen	54
Troubleshooting	55

Safety Precautions

- Thoroughly read the following safety precautions prior to installation.
- Observe the following precautions to ensure safety.

 WARNING	Indicates a risk of death or serious injury.
 CAUTION	Indicates a risk of serious injury or structural damage.

● Nomenclature





- After reading this manual, pass it on to the end user to retain for future reference.
- Keep this manual for future reference and refer to it as necessary. This manual should be made available to those who repair or relocate the controller. Make sure that the manual is passed on to any future TC-24A users.


All electric work must be performed by qualified personnel.


General precautions


WARNING


Do not install the unit in a place where large amounts of oil, steam, organic solvents, or corrosive gases, such as sulfuric gas, are present or where acidic/alkaline solutions or sprays are used frequently. These substances can compromise the performance of the unit or cause certain components of the unit to corrode, which can result in electric shock, malfunctions, smoke, or fire. 

To reduce the risk of injury or electric shock, before spraying a chemical around the controller, stop the operation and cover the controller. 


To reduce the risk of shorting, current leakage, electric shock, malfunctions, smoke, or fire, do not wash the controller with water or any other liquid. 


To reduce the risk of injury or electric shock, stop the operation and switch off the power supply before cleaning, maintaining, or inspecting the controller. 


To reduce the risk of electric shock, malfunctions, smoke or fire, do not operate the switches/buttons or touch other electrical parts with wet hands. 


Properly install all required covers to keep moisture and dust out of the controller. Dust accumulation and water can cause electric shock, smoke, or fire. 


CAUTION


To reduce the risk of fire or explosion, do not place flammable materials or use flammable sprays around the controller. 

To reduce the risk of injury and electric shock, avoid contact with sharp edges of certain parts. 

To reduce the risk of damage to the controller, do not directly spray insecticide or other flammable sprays on the controller. 


To avoid injury from broken glass, do not apply excessive force on the glass parts. 


To reduce the risk of electric shock or malfunctions, do not touch the touch panel, switches, or buttons with a pointy or sharp object. 

To reduce the risk of injury, wear protective gear when working on the controller. 

Precautions during installation


WARNING

Do not install the controller where there is a risk of leaking flammable gas. If flammable gas accumulates around the controller, it may ignite and cause a fire or explosion. 


Properly dispose of the packing materials. Plastic bags pose suffocation hazard to children. 

Precautions for moving or repairing the controller

WARNING

The controller should be repaired or moved only by qualified personnel. Do not disassemble or modify the controller.  Improper installation or repair may cause injury, electric shock, or fire.

CAUTION

To reduce the risk of shorting, electric shock, fire, or malfunction, do not touch the circuit board with tools or with your hands, and do not allow dust to accumulate on the circuit board. 

Additional precautions

To avoid damage to the controller, use appropriate tools to install, inspect, or repair the controller.

To avoid damage to the controller, do not overtighten the screws.

TC-24A is designed for exclusive use with the Building Management System by Mitsubishi Electric. The use of this controller for with other systems or for other purposes may cause malfunctions.

To avoid discoloration, do not use benzene, thinner, or chemical rag to clean the controller. To clean the controller, wipe with a soft cloth soaked in water with mild detergent, wipe off the detergent with a wet cloth, and wipe off water with a dry cloth.

To avoid damage to the controller, provide protection against static electricity.

Function List

The table below summarizes the functions that are available on the TC-24A.


Refer to the pages listed for details.

Function		Description
Unit Operation	ON/OFF Operation	Switches the ON/OFF operation of the units such as air conditioning units. The LED on the Collective ON/OFF button will light up when one or more units are in operation and off when all units are stopped.
	Mode *1	Switches the mode "Cooling/Dry/Fan/Auto/Setback/Heating" for each group or all groups. (Switches the mode "Bypass/Heat recovery/Auto" for LOSSNAY groups.)
	Setback Mode *1	Automatically switches the operation mode between cooling and heating to maintain the room temperature within the set temperature range. The maximum/minimum limit temperature can be overridden.
	Set Temperature *1	Sets the set temperature for each group or all groups.
	Fan Speed *1	Adjusts the fan speed for each group or all groups.
	Air Direction *1	Adjusts the air direction for each group or all groups.
	Louver *1	Enables/disables the louver for each group or all groups.
	ON/OFF Operation for Interlocked Ventilation *1	The ON/OFF operation of the interlocked ventilation unit is interlocked with the ON/OFF operation of the air conditioning unit. The interlocked ventilation units can be independently operated for ON (High/Low)/OFF for each group or all groups. (When the ventilation unit is interlocked with the air conditioning unit, the ventilation mode cannot be used.)
Time and Schedule	Date and Time	Sets the date, time, and display formats. The current time will appear at the top right corner of the HOME screen.
	Weekly/1-day schedule	<ul style="list-style-type: none"> • Allows the user to set the Weekly schedule for each group. • Maximum of 16 events can be scheduled for each day. • The types of actions that can be scheduled are as follows: ON/OFF, Mode, Set Temperature, Fan Speed, Air Direction, and Remote Controller Operation Prohibition. • Maximum of 12 patterns can be configured for the Weekly schedule, and 5 for 1-day schedule. • 1-day schedule overrides the Weekly schedule.
System Management	HOLD	Enables/disables the hold function for each group or all groups. * When the hold function is enabled, the current operation status is retained until the hold function is disabled.
	System Cangeover	Automatically switches the entire system (all indoor units that are connected to the same outdoor units) to Cooling or Heating by periodically monitoring the room temperature and the preset temperature of each group and determining the best operation mode. · The system changeover function is not available for the following types of products: Simultaneous Cooling/Heating units (with automatic mode change function), Mr. SLIM, LOSSNAY, and DIDO controller.

*1: Available functions vary depending on the unit type. Only the functions that are supported by the connected units can be controlled from the TC-24A.

Page	Screen		Screen/Button name
	Home	Main Menu	
9 20	●	●	HOME screen (GRID screen, LIST screen, GROUP screen, Multiple group selection screen), Set Schedule screen, Collective ON/OFF button
9 20	●	●	GROUP screen, Multiple group selection screen, Set Schedule screen SETBACK button (only when enabling/disabling the SETBACK mode)
9 21	●	●	GROUP screen, Multiple group selection screen, Set Schedule screen, SETBACK button
21	●	●	GROUP screen, Multiple group selection screen, Set Schedule screen
23	●	●	GROUP screen, Multiple group selection screen, Set Schedule screen
23	●	●	GROUP screen, Multiple group selection screen, Set Schedule screen
23	●		GROUP screen, Multiple group selection screen
23	●		GROUP screen, Multiple group selection screen
28		●	Date and Time screen
29		●	Set Schedule screen, Check Current Settings screen
9 24	●		GROUP screen, Multiple group selection screen, HOLD button
52		●	System Changeover screen

Function List (cont'd)

Function		Description
Restrictions Settings	Lock Buttons	Locks the following functions: ON/OFF, Mode (including SETBACK), Set Temperature, Fan Speed, and HOLD.
	Set Temperature Range Limit	Limits the available temperature range for the local remote controllers (each group or all groups).
	Prohibit Remote Controller	Locks the following buttons on the local remote controllers: ON/OFF, Mode, Set Temperature, and Filter Reset buttons (collectively or by group)
Basic Settings	Display Format	Selects the display formats for the following items: Display language, temperature unit, room temperature, display or non-display of Cooling/Heating mode icons (during Auto mode), and backlight timer, and group names.
	Button Setting	<ul style="list-style-type: none"> Selects the groups that the operation applies to when the Collective ON/OFF, HOLD, or SETBACK button on the controller is pressed. All groups are selected by default. The maximum and minimum temperatures can be set for the SETBACK operation.
	HOME screen Operation Mode Setting	<p>When the Group icon is touched, the action differs depending on the operation mode. Default is set to the operation mode 2.</p> <p>Operation mode1: Turns ON/OFF the units in the group whose Group icon is touched.</p> <p>Operation mode2: Displays the check mark when Group icon is touched. Touch the Group icons of the groups to be operated, and then touch the "OPERATE" button to move to the Group screen. Multiple groups can be selected. Use this mode when operating the multiple groups collectively.</p> <p>Operation mode3: Directly moves to the Group screen of the group whose Group icon is touched.</p>
	Volume Control	Sets the sound volume and screen brightness.
Maintenance	Error	If an error occurs on the TC-24A controller or the units and controllers it controls, the LED on the Collective ON/OFF button will blink. If an error occurs on the indoor or LOSSNAY units,  will appear on the corresponding group icon on the HOME screen. The error code can be verified and reset on the Status List screen.
	Filter sign	Filter Icon will appear on the HOME screen when the filter is due for cleaning. The icon can be removed from the Status List screen.
	Touch Panel Cleaning Mode	Disables the touch panel to allow the user to clean the panel.
	Touch Panel Calibration Mode	Calibrates the touch panel if the touch panel does not respond correctly when touched.
Miscellaneous	External input	Receives input signals from external devices and start/stop all groups of units or permit/prohibit operations from the local remote controllers. Requires cable connections.
	External output	Outputs the operation status of the units (ON/OFF) or error signals to external devices collectively, using contact signals. Requires cable connections.

	Page	Screen		Screen/Button name
		Home	Main Menu	
	36		●	Lock Buttons screen
	38		●	Set Temperature Range Limit screen
	40		●	Set Schedule screen, Prohibit Remote Controller screen
	42		●	Display Format screen
	46		●	Setback Button Setting screen, Hold Button Setting screen, Collective Operation Button setting screen
	47		●	Group Icon Setting screen
	48		●	Volume control screen
	50	●	●	HOME screen (GRID screen, LIST screen, GROUP screen), Status List screen
	50	●	●	HOME screen (GRID screen, LIST screen, GROUP screen), Status List screen
	54		●	Touch Panel Cleaning screen
	49		●	Touch Panel Calibration screen

Names and Functions of Controller Components

Product features

The TC-24A described in this manual is a centralized controller with color LCD touch panel for air conditioning units, LOSSNAY, and general equipment using the Mitsubishi Electric DIDO controller (PAC-YG66DCA).

TC-24A can control up to 24 units/24 groups. (*1)

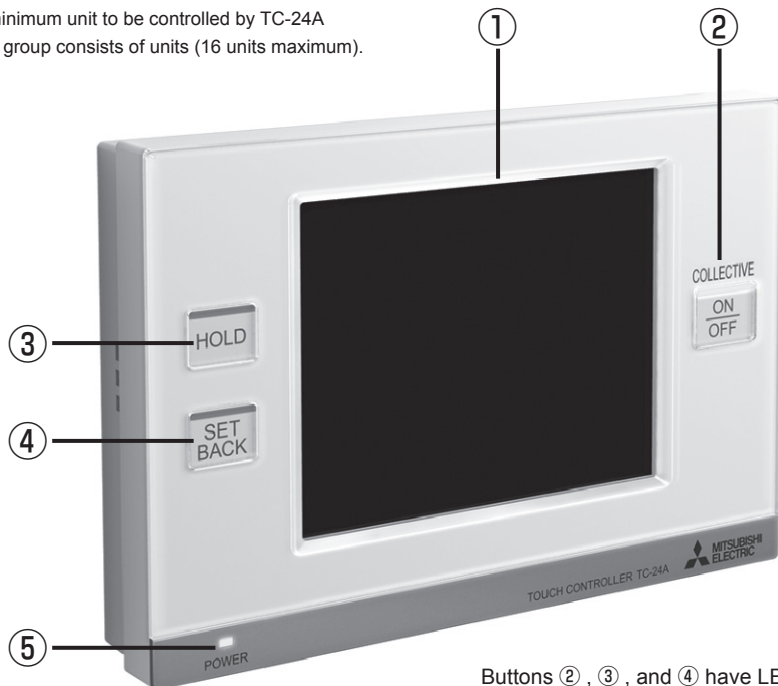
TC-24A controls and monitors the air conditioning units of each group. TC-24A also can control detailed scheduling and prohibits the local remote controller operation in each room (group), which may lead to energy savings.

Basic operations are accessed through the TC-24A touch panel. ON/OFF, Hold, and Set back operations that control air conditioning units collectively are accessed by using buttons next to the touch panel.

TC-24A display screen consists of three types, corresponding to the usage.

- HOME screen : Monitoring screen to monitor the operation status of the units (described in this Instruction Book)
- Main Menu screen : Setting screen to set the functions such as schedule settings (described in this Instruction Book)
- Maintenance screen : Initial setting screen to set the basic systems such as group settings (described in Initial Setting Manual)

* 1 Group: minimum unit to be controlled by TC-24A
A group consists of units (16 units maximum).



Buttons ② , ③ , and ④ have LED on the top.

Touch panel / Buttons

① Display/Touch panel

TC-24A features a 5"-wide color LCD touch panel. Touch panel displays the operation status of the units. Function settings such as week schedule settings are accessed through the touch panel. The backlight lights up when the panel is touched, and lights off after certain period of time. The backlight will remain lit as long as an error exists.

② **Collective ON/OFF** Button *1

The **Collective ON/OFF** button enables the collective ON/OFF function that allows the user to turn on/off the air conditioning units, LOSSNAY, and DIDO controllers in all groups collectively. The LED corresponds to the operation status of controlled units.

Unlit : Indicates that all units are stopped.

Lit : Indicates that one or more units are in operation.

Blink : Indicates that an error is occurring.

③ **HOLD** Button *1, *2, *3

The **Hold** button enables the hold function that allows the user to retain the current operation status for all selected groups collectively.

While the hold function is enabled, the scheduled operation is suspended, and the local remote controller operation is also prohibited.

Unlit : Normal operation

Lit : HOLD-on

④ **SET BACK** Button *1, *2, *3

The **Setback** button enables the setback mode for all selected groups collectively. The setback function automatically switches the system between cooling and heating to maintain the room temperature within the set temperature range. The wider the set temperature range, the greater the energy saving.

To keep the setback mode, enable the hold function.

Unlit : Normal operation mode

Lit : Setback mode

⑤ **Power indicator**

The power indicator lights up when the power to TC-24A is turned on.

Unlit : Power OFF

Lit : Power ON

*1 When the button is pressed while the operation is prohibited, the LED will blink twice.






*2 The hold and setback functions can be enabled only through the HOME screen.

*3 The LED lights on and off when the button ③ / ④ is pressed.

Screen Configuration [HOME screen]

1. How to switch the HOME screen

Touch tubs to change the display format.

-  : Displays the GRID screen
-  : Displays the GRID (zoom-out) screen.
-  : Displays the GRID (zoom-in) screen.
-  : Displays the LIST screen.
-  : Displays the GROUP screen.

2. How to move to the Main Menu screen

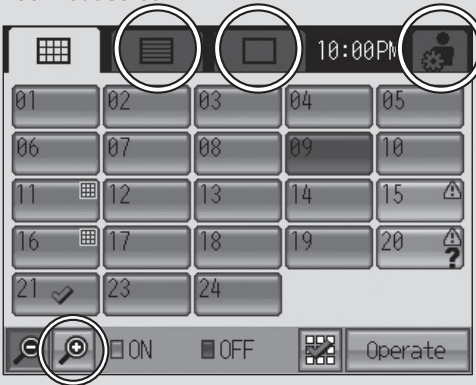
-  : Displays the Main Menu screen.

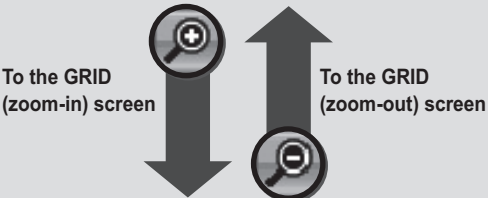
3. How to move to the Maintenance screen

Refer to Initial Setting Manual.

GRID screen

Zoom-out screen

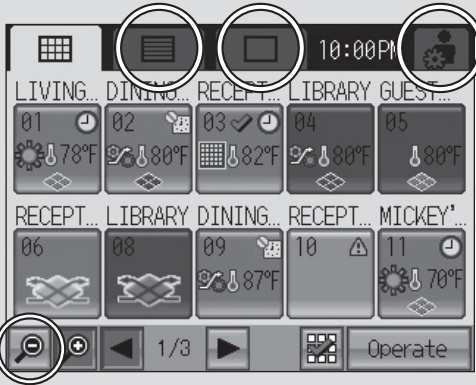




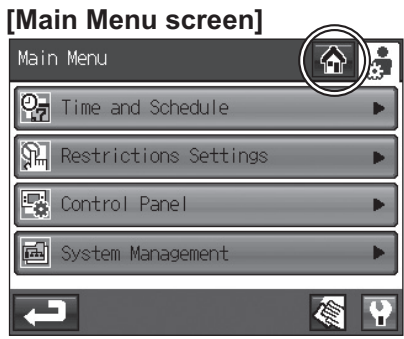
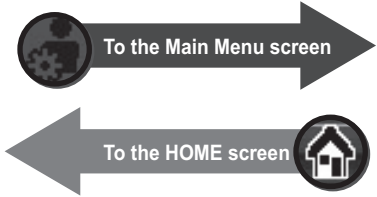
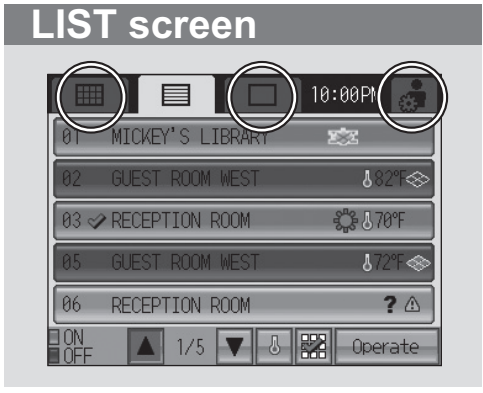
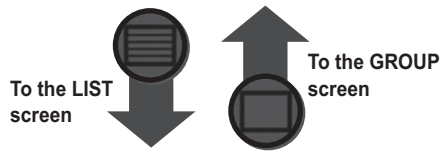
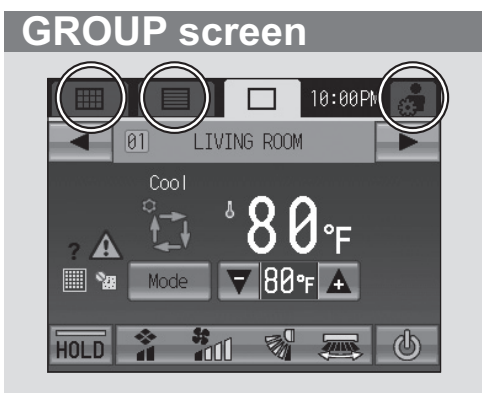
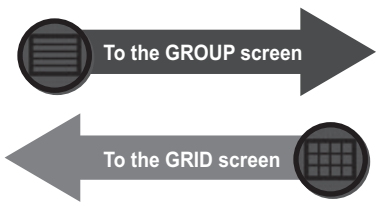
To the GRID (zoom-in) screen

To the GRID (zoom-out) screen

Zoom-in screen



HOME screen

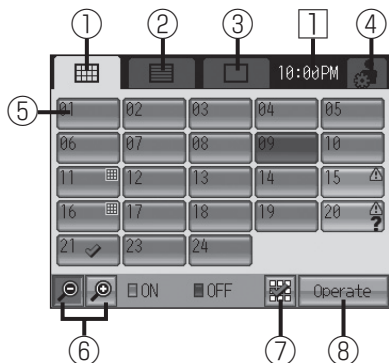


Buttons [HOME screen]

HOME screen

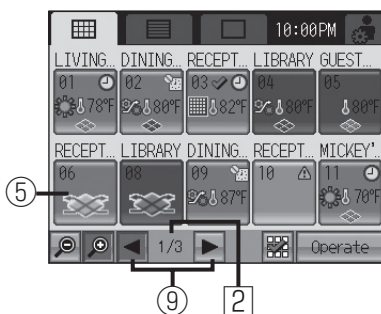
GRID (zoom-out) screen

Displays the operation status of all groups.



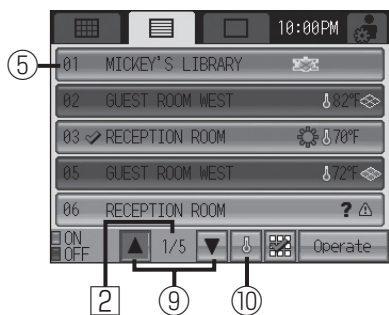
GRID (zoom-in) screen

Displays the detailed operation status of each group. (10 groups on 3 pages maximum)



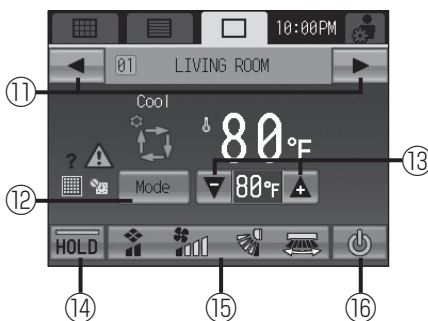
LIST screen

Displays the detailed operation status of each group with group name. (5 groups on 5 pages maximum)



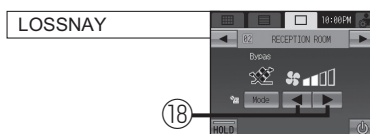
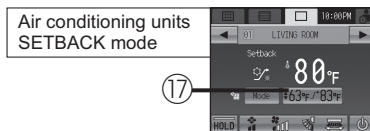
GROUP screen

Displays the detailed operation status of each group. Sets group operations. (When the air conditioning units are controlled)



Note: Display ⑦ and ⑧ vary depending on the operation mode. Refer to P19 "Operation mode" for details.
Sample displays above are for default setting: Operation mode 2.

Operation mode 1	
Operation mode 2	Operate
Operation mode 3	



① GRID screen button

Displays the GRID screen.

② LIST screen button

Displays the LIST screen.

③ GROUP screen button

Displays the GROUP screen.

④ MAIN MENU screen button

Displays the MAIN MENU screen.



⑤ Group icon (operation status display) button

Operation differs depending on the operation mode.
Operation mode 1
Turns ON/OFF the units in the group whose Group icon is touched.

Operation mode 2
Switches the Group icon between Selected (checked) and Deselected (unchecked). (Default) Displays the check mark when Group icon is touched.

Operation mode 3
Directly moves to the Group screen of the group whose Group icon is touched.

⑥ GRID (zoom-out/zoom-in) screen button

 : Displays the zoom-out screen.
 : Displays the zoom-in screen.

⑦ Select All button

Selects/Deselects groups collectively. Adds check marks to all selected icons.

⑧ Move-to-the-selected-group button

Moves to the GROUP screen of the selected group. Moves to the Multiple group selection screen when multiple groups are selected. Refer to P25 "Multiple group selection screen" for details.

⑨ Page button

Flips through pages.

⑩ Display selection button

Shows/Hides the display for the information below.

- Set temperature
- Scheduled operation is enabled.
- Hold function is enabled.

⑪ Group button

Switches the group to be displayed.


⑫ Mode button

Switches the operation mode of the air conditioning units and LOSSNAY.

⑬ Set temperature button

Adjusts the set temperature by using the + and – buttons. Current room temperature appears above the button. Set temperature appears between the + and – buttons.

⑭ HOLD button

Enables/Disables the hold function for the displayed groups. Icon  appears while the hold function is enabled.

⑮ Interlocked ventilation (LOSSNAY)/ Air direction/Fan speed/Louver setting button

Displays the popup window of Interlocked ventilation (LOSSNAY)/Air direction/Fan speed/ Louver setting screen.
* Refer to P23 "Interlocked ventilation (LOSSNAY)/ Air direction/Fan speed/Louver setting" for the popup window.

⑯ ON/OFF button

Changes the operation to ON/OFF.

⑰ Set temperature button (SETBACK mode)

Displays the popup window to adjust the set temperature during the SETBACK mode. Current room temperature appears above the button. Set temperature appears on the button. Refer to P22 "Temperature setting" for details.

⑱ Fan speed selection button


Switches LOSSNAY fan speed between Lo and High.

① Current time

Displays the current time.

② Current page/Total pages

Displays the Current page/Total page number.

Note: Depending on the units to be controlled and TC-24A settings, available button operations and displays vary.
: While the  icon is displayed on the button, the operation is locked.

Icon Displays [HOME screen]

(1) GRID (zoom-out) screen



[ON (BG Color: blue)]

Group No.



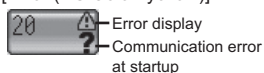
•Filter sign

•Check mark

[OFF (BG Color: black)]



[Error (BG Color: yellow)]



•Error display

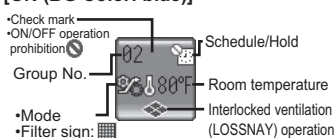
•Communication error at startup

(2) GRID (zoom-in) screen



[Air conditioning]

[ON (BG Color: blue)]



•Check mark

•ON/OFF operation prohibition

Group No.

•Mode

•Filter sign

Schedule/hold

Room temperature

Interlocked ventilation (LOSSNAY) operation

[OFF (BG Color: black)]



[LOSSNAY group]

[ON (BG Color: blue)]



Filter sign:

LOSSNAY icon

Schedule/hold

[OFF (BG Color: black)]



[General equipment group]

[ON (BG Color: blue)]



General equipment icon

Schedule/hold

[OFF (BG Color: black)]



[Error (BG Color: yellow)]

[Air conditioning unit/LOSSNAY/General equipment group]




•Error display

Error:

Displays  when an error occurs.


Startup (communication) error:

Displays  as well as the error display when a startup (communication) error occurs.


Filter sign:

Displays  when filter needs maintenance.

During scheduled operation:

Displays  during scheduled operation.

While hold function is enabled:

Displays  while hold function is enabled.

Room temperature:

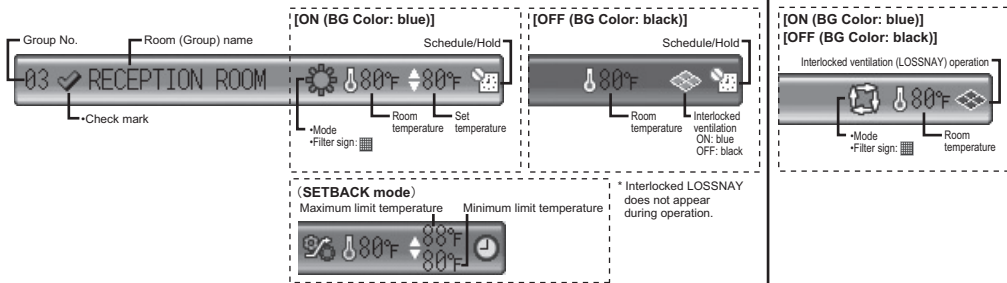
Display ranges 8-39°C (46-102°F). When the temperature is beyond the range, 8°C (46°F) or 39°C (102°F) will blink on the display.

When multiple air conditioning units (indoor units) are registered to a group, current indoor temperature on the main indoor unit is displayed.

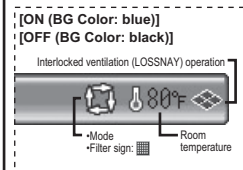
(3) LIST screen



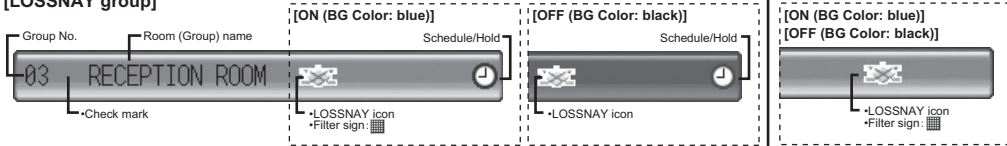
Display selection button



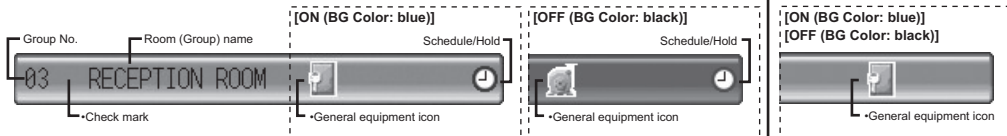
Display selection button



[LOSSNAY group]

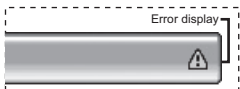


[General equipment group]



[Error (BG Color: yellow)]

[Air conditioning unit/LOSSNAY/General equipment group]



Interlocked ventilation (LOSSNAY):

Displays when there are ventilation units interlocked with the air conditioning (indoor) units in the group.

Icon color indicates the operation status (Blue: ON, Black: OFF).

General equipment icon:

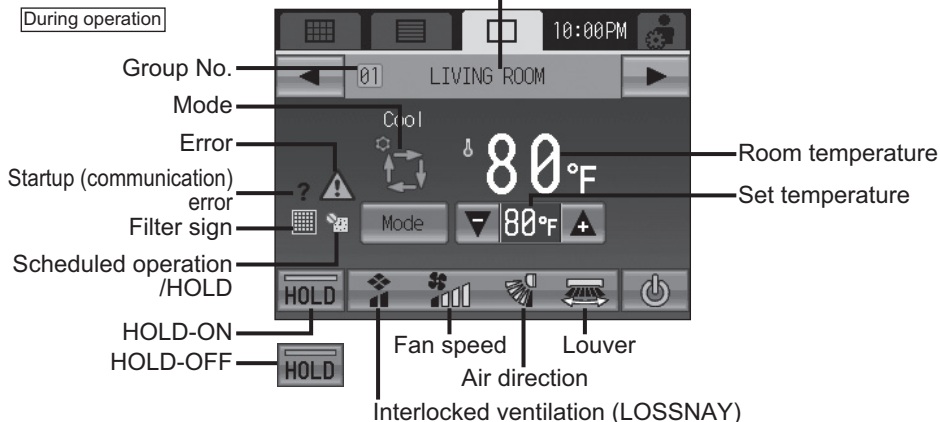
Displays the General equipment type.

Icon Displays [HOME screen] (cont'd)

GROUP screen

[Air conditioning unit group]

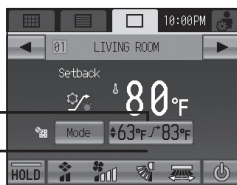
Group name



[SETBACK mode]

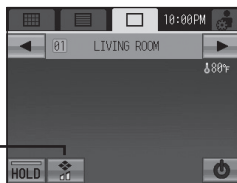
Set maximum/minimum limit temperature →

Remaining OVERRIDE time →



[While the unit is stopped]

Interlocked ventilation (LOSSNAY)



Error:

Displays when an error occurs.

Startup (communication) error:

Displays as well as the error display when a startup (communication) error occurs.

Filter sign:

Displays when filter needs maintenance.

During scheduled operation:

Displays during scheduled operation.

While hold function is enabled:

Displays while hold function is enabled.

Room temperature

Display ranges 8-39°C (46-102°F). When the room temperature is beyond the range, 8°C (46°F) or 39°C (102°F) will blink on the display. When multiple air conditioning units (indoor units) are registered to a group, current indoor temperature on the main indoor unit is displayed.

Note : While the icon is displayed on the button, the operation is locked.

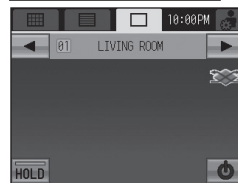
[LOSSNAY group]

During operation



Fan speed display

While the unit is stopped



[General equipment group]

During operation



General equipment icon

While the unit is stopped



Remaining OVERRIDE time

Displays the remaining time before the setback control resumes to the original set temperature when the maximum/minimum limit temperature is temporarily changed or when the set temperature is changed through the local remote controllers while setback control is executed.

Interlocked ventilation (LOSSNAY)

Displays the operation status of the ventilation that is interlocked with the air conditioning (indoor) units.

General equipment icon

Displays the General equipment type.

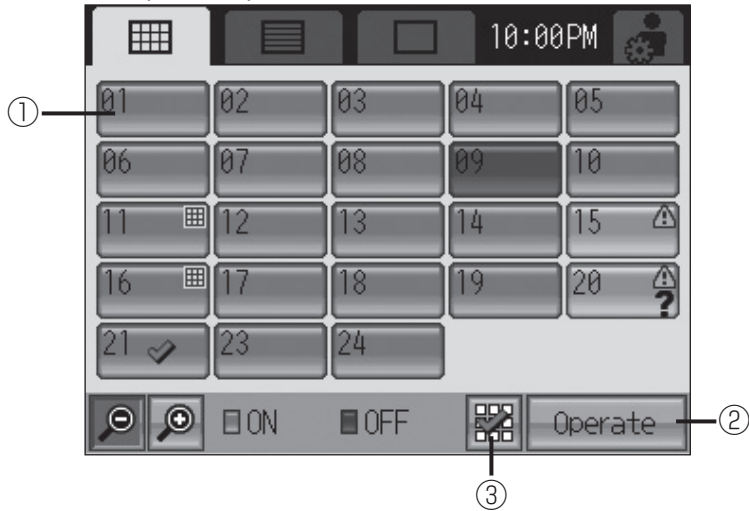
Basic Operations

Screen selection

GRID (zoom-out) screen appears at the initial startup.

Select the desired screen.

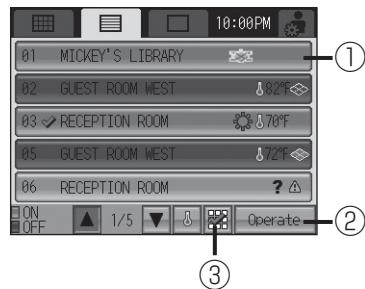
GRID (zoom-out) screen



GRID (zoom-in) screen



LIST screen



Group selection


• Operation mode 1, 2, 3

When the Group icon ① is touched, the action differs depending on the operation mode. Operation mode consists of three modes (shown below), and default is set to the operation mode 2. Refer to P47 for changing the mode.

• Operation mode 2: appears in the area marked ② Allows the user to select groups to be operated. Moves to the Group screen.

Touch the Group icon ① to select the group to be operated. Groups can be selected on the GRID (zoom-in) or the LIST screens.

Touch the Group icon ① to switch between displaying check marks (selected) and hiding check marks (deselected). Touch ③ to select all groups.

Touch the Group icons of the groups to be operated, and then touch  ② to move to the Group screen.

The number of selected groups = 1 : The selected group appears on the Group screen.
Refer to P20 "Group screen" for details.

The number of selected groups > 1 : The Multiple group selection screen appears.
(The selected groups can be operated collectively.)
Refer to P25 "Multiple group selection screen" for details.

• Operation mode 1: appears in the area marked ② Stops or starts the operation of the air conditioning units through Group icon ①

*ON/OFF operation lock

When TC-24A restricts its own ON/OFF operation, the icon above will appear. The ON/OFF operation will be disabled.

*During receiving the external input signal

The ON/OFF function cannot operate when the following displays appear.

■Displays the emergency stop level-signal input*



When the group icon button is set to the operation mode 1

■Displays ON/OFF level-signal input



The button cannot be operated.

• Operation mode 3: Nothing appears in the area marked ② Moves to the Group screen by touching the Group icon ①

Basic Operations (cont'd)

Operation Screen (Group screen)

Operating the Air conditioning unit group



ON/OFF operation

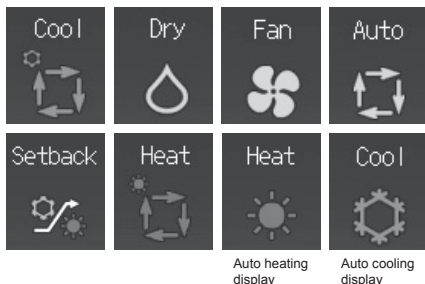
Touching ③ allows the indoor units in the displayed group to start/stop.

When interlocked ventilation units (LOSSNAY) are connected, the ventilation units work in conjunction with indoor units.

ON:  OFF: 
[Green] [Black]

Mode (useable only while the unit is in operation)

Touch ② to access the modes in order of "Cooling, Dry, Fan, Auto, Setback, and Heating."
 The selected mode will appear in the area labeled ①.



*Refer to P43 for Auto mode cooling/heating settings.

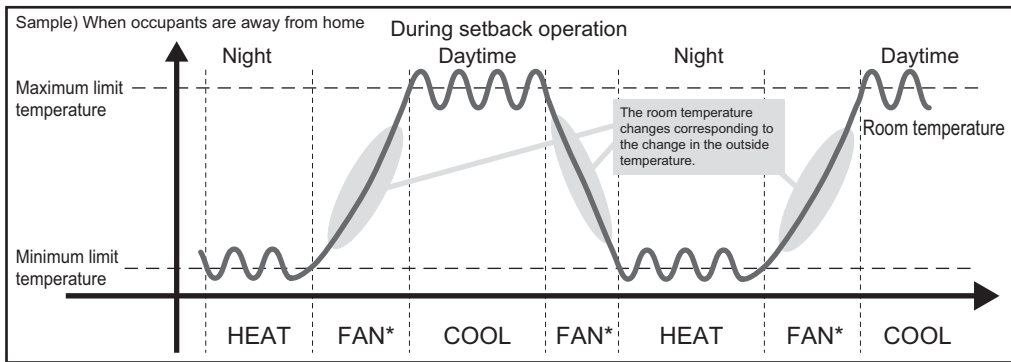
*To operate an indoor unit in the heating (cooling) mode while the indoor unit is already operating in the opposite mode, the operation mode cannot be changed until all of the indoor units operate in the same mode or stop. In this case, the mode ① will blink.

*Available mode varies depending on the model.
 Modes that are unavailable do not appear.

Setback mode

The setback function automatically switches the operation mode between cooling and heating to maintain the room temperature within the set temperature range.

The following figure shows the operation patterns of the unit that the setback operation is executed.



*The status of the air conditioning units do not reflect the mode.

Notes on setback operation


- When the setback operation is performed on the air conditioning units that do not have Auto mode, use the system changeover function (*1) to prevent the coexistence of the air conditioning units in cooling and heating in a refrigerant system.

*1 Refer to P52 for System changeover.

- When the setback operation is performed on the cooling-only units, the maximum/minimum limit temperature can be set, but only maximum limit temperature is controlled in the operation.
- When the set temperature range is set through the local remote controllers and the setback operation is performed, the setback operation (override (*2)) may be suspended.

*2 Refer to P22 for OVERRIDE.

Temperature setting (useable only while the unit is in operation)

Touch  to adjust the temperature setting.

(* When fan mode is selected, the temperature setting cannot be made.)

*Available set temperature range varies depending on the mode or model.

The temperature can be set within the following range.

Cool/Dry : 19°C - 30°C / 67°F - 87°F

Heat : 17°C - 28°C / 63°F - 83°F

Auto : 19°C - 28°C / 67°F - 83°F

Setback : [Upper limit]19°C - 30°C [21°C - 30°C] / 67°F - 87°F [69°F - 87°F]

[Lower limit]12°C - 26°C [17°C - 26°C] / 53°F - 79°F [63°F - 79°F]

* [] in case of using Mr.SLIM units.

* Set temperature range varies depending on the model.

Basic Operations (cont'd)

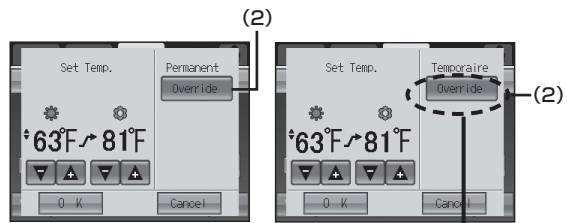
While the setback operation is performed

- To change the setback maximum/minimum limit temperature

Touch the set temperature button to display the screen for setback maximum/minimum limit temperature.



Then, one of the screens on the right appear. Touch the **VERRIDE** button (2) to switch between [TEMPORARY] and [PERMANENT] (shown above the **VERRIDE** button).

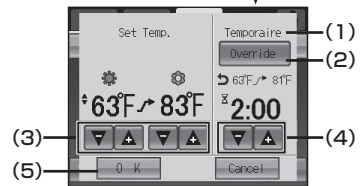


Touch (3) to set the maximum/minimum limit.

When [TEMPORARY] is selected, the timer will appear, and the original maximum/minimum limit temperature will appear above the timer.

Touch (4) to set the timer.

Then, touch the [OK] button (5).



When the scheduled setback operation is performed, [TEMPORARY] will appear on the screen.

When the setback operation is performed by selecting the setback mode or pressing the SET BACK button, [PERMANENT] will appear on the screen.



Timer does not appear on the screen.

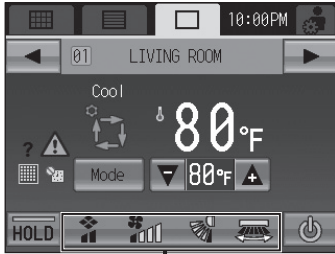
* After the set time has elapsed, the setback control resumes to the original maximum/minimum limit temperature.

* When the set temperature is changed through other controllers while setback operation (override) is executed, the temperature display is changed and setback operation (override) is suspended. After two hours have elapsed, the setback operation resumes to the original maximum/minimum limit temperature.

* The maximum/minimum limit temperature cannot be temporarily changed on the multiple group selection screen. (Override cannot be used.)

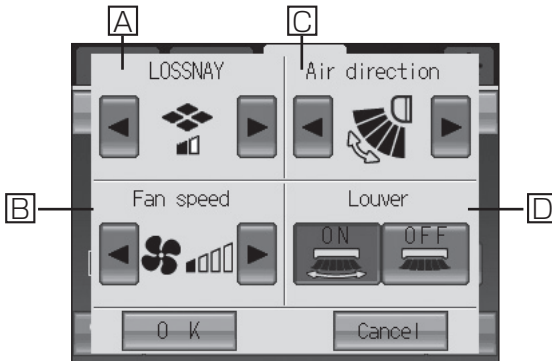
* The override time can be set up to four hours in 10-minute increments.

Interlocked ventilation units (LOSSNAY)/ Fan speed/Air direction/Louver settings



④

Touch ④ to show the Interlocked ventilation units (LOSSNAY)/Fan speed/Air direction/Louver settings screen.



A : Interlocked ventilation units (LOSSNAY).

*When interlocked ventilation units are not connected, [A] does not appear.



B : Fan speed (useable only while the unit is in operation)

* [B] does not appear when the model does not have this function.

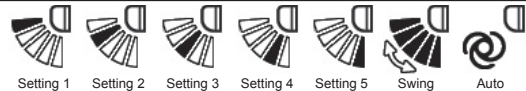
* Available fan speed varies depending on the model.



C : Air direction (useable only while the unit is in operation)

* [C] does not appear when the model does not have this function.

* Available air direction varies depending on the model.



D : Louver (useable only while the unit is in operation)

* [D] does not appear when the model does not have this function.



After setting **A** through **D**, touch the **OK** button.

Basic Operations (cont'd)

Hold Function Setting



Touch ⑤ to enable/disable the hold function.

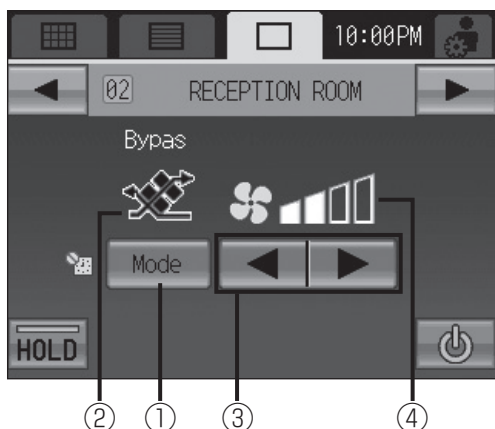
* When the hold function is enabled, the current operation status is retained until the hold function is disabled.

* When this function is enabled, the scheduled operation will be prohibited as well as the following remote controller operations: Stop, operation mode change, preset temperature change.

 is displayed while the hold function is enabled.

Operating the LOSSNAY group

Displays that are not marked by numbers on the screen are the same as those on the Air conditioning unit group screen.



Mode

Touch ① to access the modes in the order "Bypass, Heat recovery, Auto."

The selected mode will appear in the area marked ②.



* Available mode varies depending on the model.
Modes that are unavailable do not appear.

Fan speed setting

Touch ③ to access the fan speeds in the order "Low, High."

The selected fan speed will appear in the area marked ④.

Operating the General equipment group

Displays that are not marked by numbers on the screen are the same as those on the Air conditioning unit group screen.



Displays the general equipment type.

*When changing icons, refer to Initial Setting Manual.

ON/OFF operation

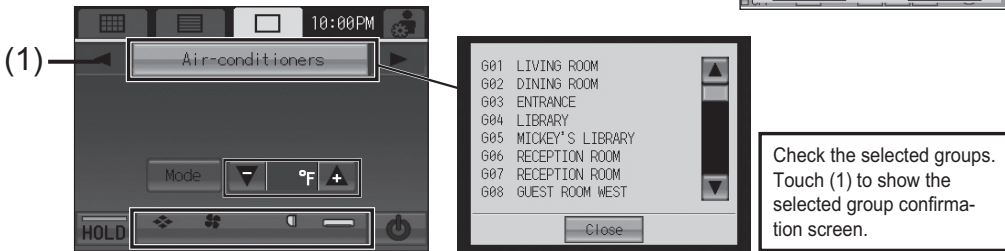
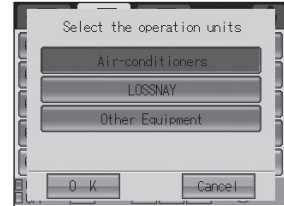
- When the general equipment is turned on, the output contact of DIDO controller (PAC-YG66DCA) also turns on.
- When the general equipment is turned off, the output contact of DIDO controller (PAC-YG66DCA) also turns off.

Multiple group selection screen

* To operate the Air conditioning unit group

Allows the user to collectively operate all groups that are selected on the GRID or LIST screen.

When selected groups include two or more unit types, select the unit type to be operated. Then, the target group will be the selected unit group.



Disabling functions

Lock Buttons

When TC-24A locks its own functions for ON/OFF, Mode, Temperature, Fan speed, Hold, the icon above will appear on the corresponding buttons, and the functions will be disabled.

When the ON/OFF function is locked, the Collective ON/OFF button will be disabled.

When the hold function is locked, the Hold button will be disabled.

When the mode function is locked, the Set back button will be disabled.

Sample) ON/OFF operation lock 

During receiving the external input signal

The ON/OFF function cannot operate when the following displays appear.

■Displays the emergency stop level signal input*



■Displays ON/OFF level signal input

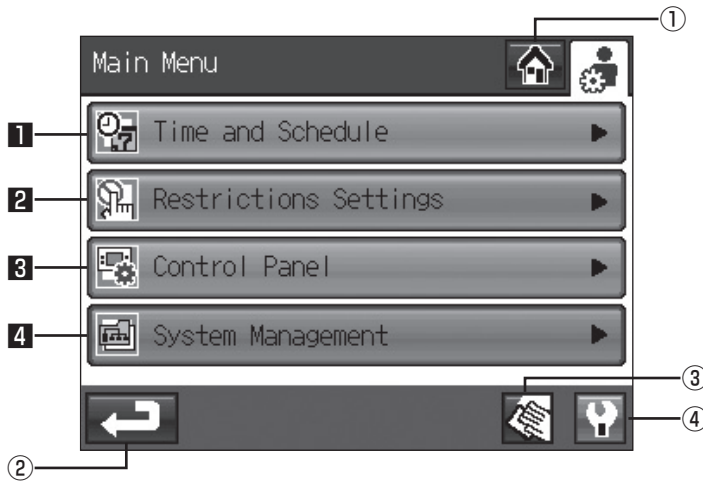


Menu Screen [Button Settings]

The Main Menu screen allows the user to configure the basic settings.

To access the [Main Menu] screen, touch the  icon at the right top corner of the [HOME] or the [Menu] screen.

Main Menu screen (Top screen)



① [HOME] button

Accesses the [HOME] screen

② Back button

Returns the screen to the previous screen.

(When touched on the Main Menu screen, returns the screen to the HOME screen.)

③ Touch Panel Cleaning button

P54

Touch this button to access the screen that will not respond when touched (except when the numbers in the four corners are touched in a specified order), allowing the user to clean the touch panel without accidentally changing the settings.

④ Service Menu button

Accesses the maintenance menu for service personnel. Normally, general users do not need to change any settings in the maintenance menu.

1 Time and Schedule

(1) Date and Time	Sets the date, time, and display formats.	P28
(2) Set schedule	Sets the Weekly and 1-day operation schedules.	P29
(3) Check Current setting	Displays the operation schedule settings.	P35

2 Restrictions Settings

(1) Lock Buttons	Locks the buttons on the TC-24A.	P36
(2) Set Temperature Range Limit	Sets the temperature range for the local remote controllers.	P38
(3) Prohibit Remote Controller	Locks the buttons* on the local remote controllers. * ON/OFF, Mode, Set Temperature, and Filter Reset buttons	P40

3 Control Panel

(1) Display Format	Selects the display formats* on the Home and Menu screens. * Display language, temperature unit, display or non-display of room temperature and Cooling/Heating mode icons (during Auto mode), and backlight timer, and group names.	P42
(2) Button Setting	<ul style="list-style-type: none">• Selects the groups that the operation applies to when the Collective ON/OFF, HOLD, or SETBACK button is pressed.• Changes the behavior of the group icon on the HOME screen. *Three setting options are available.	P46
(3) Volume Control	Sets the sound volume and screen brightness.	P48
(4) Touch Panel Calibration	Calibrates the touch panel.	P49

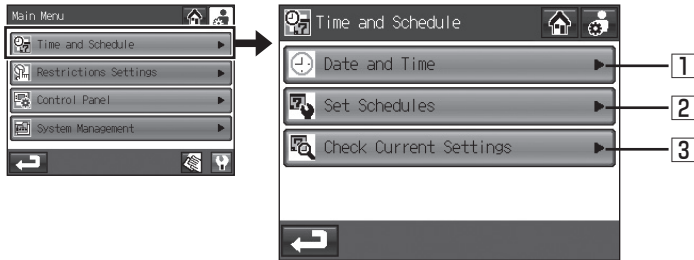
4 System Management

(1) Status List	Displays errors and filter signs.	P50
(2) System-Changeover	Selects the system changeover* setting. * Automatically switches the entire system to Cooling or Heating based on the room temperature and the preset temperature of each group.	P52

Usage - Main Menu Settings

1 Time and Schedule screen

Main Menu > Time and Schedule



Main Menu > Time and Schedule > Date and Time

1 Setting the date, time, and display format



1. Touch the **1** **Date and Time** button on the [Time and Schedule] screen.
2. On the [Date and Time] screen, touch the **1** [Date] tab to set the date, or **2** [Time] tab to set the time.
3. Using the **3** **▼** **▲** buttons, set the following items: [Day/Month/Year] and [Hour/Minute/AM · PM].
4. On each tab, select one of the three display formats by checking the **4** checkbox next to the desired format.
5. Touch the **5** **Save** button.

- The initial date/time setting is 1/1/2010 12:00AM.
- If the clock is set forward, the operations that were scheduled to have taken place before the new time will be cancelled.

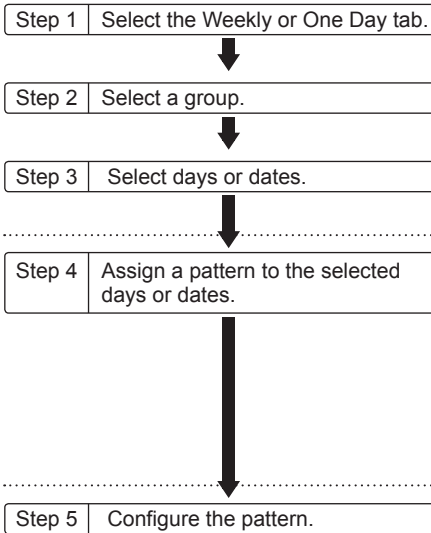
2 Setting the operation schedule

Types of schedules *1		Number of operation patterns *2
Weekly	Use to assign an operation pattern for each day of the week to be executed every week.	Maximum 12 patterns
One Day	Use to assign unique operation patterns for specific dates (up to seven days in advance, including the current date).	Maximum 5 patterns

[Note] If a specific pattern is assigned to multiple groups or days and the configuration of the pattern is changed, the change will be reflected on all the groups and days.

Use a different pattern number to save a given configuration of events if you do not want the changes to be reflected on the groups and days to which the pattern is assigned.

Schedule setting flowchart



Set Schedule screens

Select Group and Days/Dates screen

Select Pattern screen

Edit Pattern screen

Usage - Main Menu Settings

1 Time and Schedule screen (cont'd)

Schedule Setting Procedures

1. Touch the [Set Schedules] button on the [Time and Schedule] screen to access the Select Group and Days/Dates screen.

- [Weekly] screen
Displays the pattern numbers that are assigned to groups and days. (1) will appear on the top left corner of the cell to which One-day schedule is assigned. One-day pattern will override the Weekly pattern.
- [One day] screen
Displays the One-day schedule patterns that are assigned to specific dates.

2. Touch the Weekly or One Day tab.
3. Select the cell where a specific group and a day (date) intersect to assign a pattern.

* Patterns can be copied, pasted, or deleted on the Select Group and Days/Dates screen.

(e.g., The weekly schedule of a specific group can be copied and pasted to another group, or the schedule pattern of a specific day can be copied and pasted to another day.)
Refer to page 32 for details.

4. On the Select Pattern screen, select [--] (deselected) or one of the 12 or 5 patterns (between [P01] and [P12] on the Weekly tab OR between [P01] and [P05] on the One Day tab). Each pattern can be newly configured, copied and pasted, or edited. See ① ② and ③ below for details.

Touch a schedule pattern to select it.

Black pattern numbers indicate that the patterns have already been configured, and the white ones indicate blank patterns.

- Appears only if the selected pattern has been configured.
- The functions not supported by the selected group will appear underlined in red, and they will not be executed.
- * Touch the < > buttons to check the actions for each scheduled event.
- * Refer to page 34 for icon definitions.

① To configure a new pattern using a blank pattern

Touch a blank pattern number, then touch the  button to access the Edit Pattern screen.
⇒ See Step 5.

If one or more patterns have been configured and saved, the message "When copying other setting patterns to edit, select the pattern to be copied, and touch the OK button." will appear. Touch the [OK] button to create a new pattern using a blank pattern. To use an existing pattern as a template, select a desired pattern and then touch the [OK] button.

② To copy an existing pattern and paste it to selected days or dates

Touch a pattern number to select it, then touch the [OK] button to return to the Select Group and Day/Date screen. To set the schedule for other groups or days/date ⇒ See Step 2.

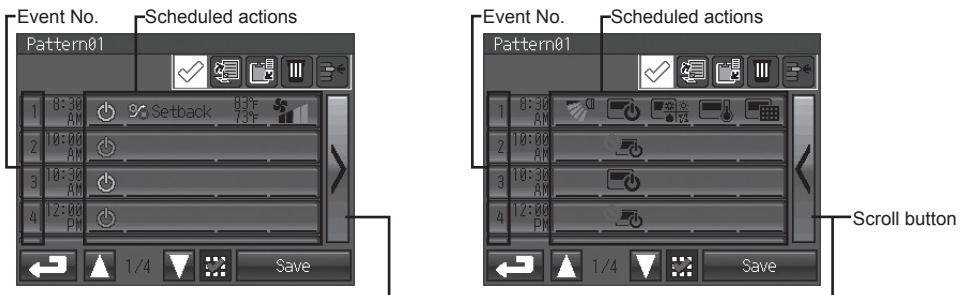
When setting is complete ⇒ See Step 11.

③ To edit an existing pattern

Touch an existing pattern number, then touch the  button to access the Edit Pattern screen.
⇒ See Step 5.

If the selected pattern number is assigned to other groups or days, the message "This pattern is used for another schedule. To use different pattern number, select the number, and touch the OK button.." will appear. To change the schedule of the day or date that was selected in Step 3 above alone, select a new blank pattern number and then touch the [OK] button. To change the setting of all groups and days to which the pattern is assigned, just touch the [OK] button.

5. On the Edit Pattern screen, touch an event number to edit its contents.



ON/OFF, Mode, Set Temperature, and Fan Speed

Air Flow Direction, Prohibit Remote Controller Operation

*1 The scheduled actions for each event will be displayed over two pages.

Use the scroll buttons to switch between the pages.

*2 On the Edit Pattern screen, the events of a specific pattern can be copied and pasted to another pattern.

Refer to page 32 for details

Usage - Main Menu Settings

1 Time and Schedule screen (cont'd)

6. Set the time and the actions for the selected event number.



* Functions that can be included in each event are as follows: Execution Time, ON/OFF, Mode, Fan Speed, Air Direction, Set Temperature, and Local Remote Controller Operation Prohibition settings.

* Refer to page 34 for icon definitions.

* The Set Temperature must be set to a temperature within the range that was specified in the Initial Settings/Basic Settings under the Service Menu.

Refer to the Initial Setting manual to change the temperature setting range.

(The temperature range for the Setback mode depends on the connected indoor units.)

7. When finished making the settings, touch the OK button to return to the Select Pattern screen.

8. Repeat Steps 5 through 7 above to set as many events and the execution time for the events as necessary.

9. When finished, touch the [Save] button.

10. Touch the Return button to return to the Select Group and Days/Date screen.

To set the schedule for other groups or days/date ⇒ See Step 2.

When setting is complete ⇒ See Step 11.

11. When finished, touch the [Save] button.

Copying, pasting, deleting, and inserting settings

Click on the checkbox next to the button to activate the Copy, Paste, Delete, and Insert buttons.

Copying and pasting the existing settings

1. Touch the item to be copied.

* Items that can be copied include the weekly schedule for a group, the pattern assigned to a specific day, or the event that is scheduled to take place at a certain time.

* A red checkmark will appear on the selected item(s).

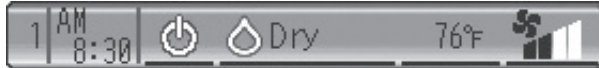
(Example) To copy the weekly schedule for a group



(Example) To copy an event (a set of actions executed at a scheduled time)



2. Touch the  Copy button. The selected item will be highlighted in blue.



3. Touch the copy destination.

* Multiple copy destinations can be selected.

* A red checkmark will appear on the selected item(s).

4. Touch the  Paste button.

5. Touch the **OK** button on the window that pops up.

Deleting selected settings

1. Touch the items to be deleted.

* Items that can be deleted at once include the weekly schedule for a group, the pattern assigned to a specific day, or the event that is scheduled to take place at a certain time.

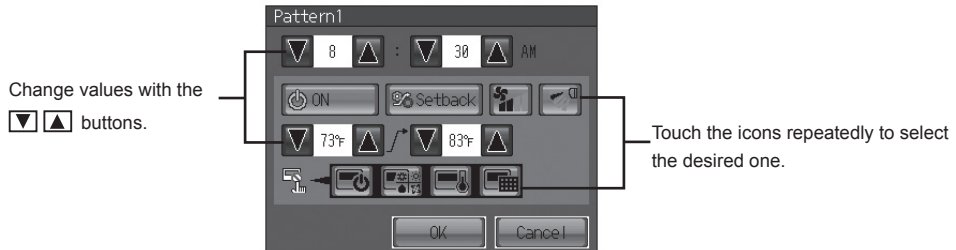
* Multiple items can be deleted at once.

2. Touch the  Delete button.

3. Touch the **OK** button on the window that pops up.

Usage - Main Menu Settings


1 Time and Schedule screen (cont'd)



Inserting an event









1. Touch a row to insert an event above it.

* A red checkmark will appear on the selected row.

2. Touch the  **Insert** button. A blank row will appear above the selected row.

* If the maximum number of events have been set, no more rows can be inserted.

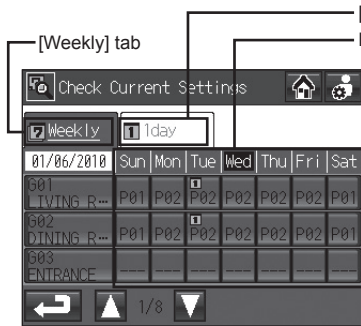
Icon Definitions

Functions	Deselected *1	Setting Options
ON/OFF		On [green] Off [black]
Mode		Cooling Dry Fan Heating Auto Setback Bypass Heat Recovery Auto Damper
Fan Speed		Quiet Low Mid High Auto
Air Flow Direction		Setting 1 Setting 2 Setting 3 Setting 4 Setting 5 Swing Auto
Local remote controller operation prohibition (ON/OFF)		Permit Prohibit
Local remote controller operation prohibition (Mode)		Permit Prohibit
Local remote controller operation prohibition (Set Temperature)		Permit Prohibit
Local remote controller operation prohibition (Filter Sign Reset)		Permit Prohibit

*1 The icons corresponding to the functions that are not scheduled will not be displayed except in the Edit Pattern popup screen.

3 Checking the Weekly/One Day Schedule Settings

1. Touch the [Check Current Settings] button on the [Time and Schedule] screen.



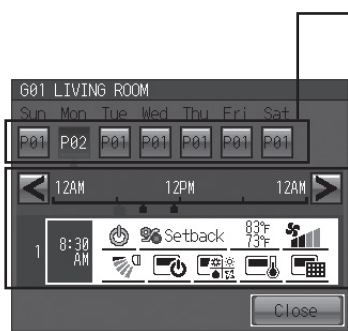
[One Day] tab
Day (Date) grid Displays scheduled patterns

- [Weekly] screen
Displays the pattern numbers that are assigned to groups and days.
(**1**) will appear on the top left corner of the cell to which One-day schedule is assigned.
One-day pattern will override the Weekly pattern.
- [One day] screen
Displays the One-day schedule patterns that are assigned to specific dates.

2. Touch the Weekly or One Day tab.

3. Touch the row that corresponds to the group whose schedules you want to check.

Touch the pattern number under a specific day to check the day's schedule that appears under the pattern numbers.



Operation pattern numbers
Schedules events for the selected pattern

- Appears only if the selected pattern has been configured.
- The functions not supported by the selected group will appear underlined in red, and they will not be executed.
* Refer to page 34 for icon definitions.

4. Touch the <> buttons to check the actions for each scheduled event.

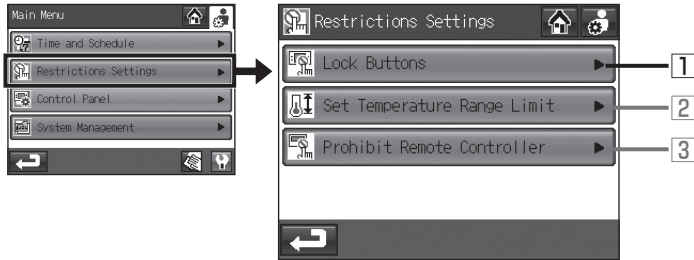
Touch the [Close] button to return to the previous screen.

5. To change the schedule settings, touch the Return button to return to the Time and Schedule screen, and access the Set Schedule screen.

Usage - Main Menu Settings

2 Restrictions Settings

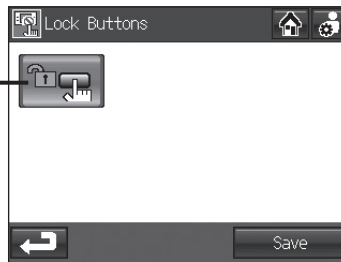
Main Menu > Restrictions Settings



Main Menu > Restrictions Settings > Lock Buttons

- 1 Locking or unlocking access to the ON/OFF, Mode, Set Temperature, Fan Speed, and HOLD settings from the HOME screen

- 1 **Enable/Disable Lock** button
Enables or disables the **Lock** buttons.



Unlocked






Locked



- 2 **Lock buttons** button
Locks or unlocks specific buttons.


- 3 **Save** button
Saves the settings.

To lock or unlock buttons

1. Touch the ① **Lock Buttons** button on the [Restrictions Settings] screen.
2. Enter the Login password on the [Login] screen, and touch the **Login** button. Refer to below for the details on log in. If the correct password is entered, the [Lock Buttons] screen will appear.
3. Touch the ①  "Lock" button.
4. Touch the buttons labeled ② to  "Lock" or  "Unlock" specific items.
5. Touch the ③ **Save** button.

To temporarily unlock all items

Touch the button labeled ① and select  "Unlock", then touch the ② **Save** button. To return to the original state, select  "Lock", and then touch the ② **Save** button.

- When access to specific settings are locked on the [Lock Buttons] screen,  will appear over the corresponding icons on the HOME screen, and will not allow the user to change the settings.


Lockable functions and the corresponding buttons

Functions	Buttons	Functions	Buttons
ON/OFF	ON/OFF button on the HOME screen	Set temperature	Set temperature button on the HOME screen
	COLLECTIVE ON/OFF button *1	Fan speed	Fan speed button on the HOME screen
MODE	Mode button on the HOME screen	HOLD	HOLD button on the HOME screen
	SETBACK button *1		HOLD button *1

*1 If the function is locked, the LED on the button will blink twice when touched.

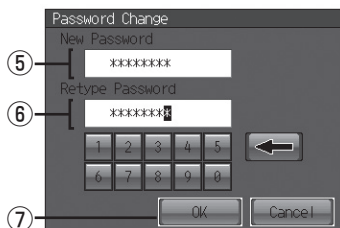
To log in





1. Enter the login password from the ① keyboard on the touch panel. Touch ②  to delete a character.
 2. Touch the ③ **Login** button.
- If the password matches, the Lock Buttons screen will be displayed.

- The initial login password is "0000". Change the password if necessary.
- If you forget the password, refer to the Initial Setting Manual.

To change the password

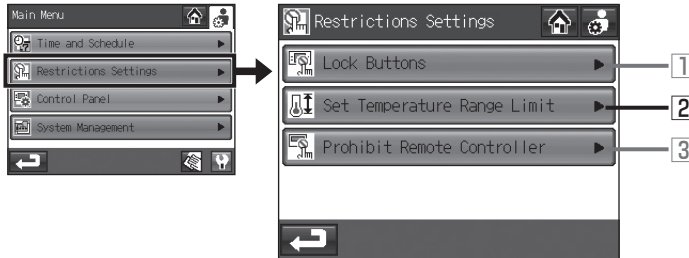


1. Enter the current password on the login screen, and then touch ④ . The screen at left will appear.
2. Enter the new password in the ⑤ [New Password] field.
 - *Password should be between four and eight characters.
 Touch ②  to delete a character.
3. Touch the ⑥ [Retype Password] field, and enter the new password again.
4. Touch the ⑦ **OK** button to reflect the change and return to the previous screen.

Usage - Main Menu Settings

2 Restrictions Settings (cont'd)

Main Menu > Restrictions Settings



Main Menu > Restrictions Settings > Set Temperature Range Limit

2 Setting the temperature ranges within which the operating temperatures can be set from the local remote controllers

① **Show Group Name List** button

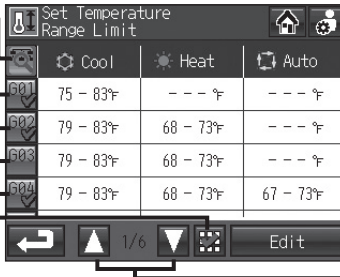
Displays a list of group names in a pop-up window.

② **Group** buttons

Displays group numbers. Touch the button for a specific group to edit the settings.

Select All button

Selects all groups.



③ **Edit** button

Edits the temperature range for the selected group.

▲▼ buttons

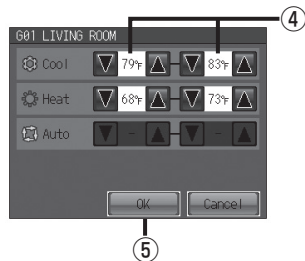
Use to flip through the pages. (Each page lists four groups.)

1. Touch the ② **Set Temperature Range Limit** button on the [Restrictions Settings] screen.
2. Read the pop-up message, and touch the **OK** button to confirm.
3. Click on the ② **Group** button on the [Set Temperature Range Limit] screen to select the groups to change their settings.
4. Touch the ③ **Edit** button.

5. Use the ④ ▼ ▲ buttons shown in the pop-up window at right to set the range for each operation mode (Cooling, Heating, and AUTO).

To clear the lower limit, keep hitting the ▼ button until -- appears. To clear the upper limit, keep hitting the ▲ button until -- appears.

Not all functions are supported by all local remote controllers. The ▼ ▲ buttons for the unsupported functions will be grayed out.



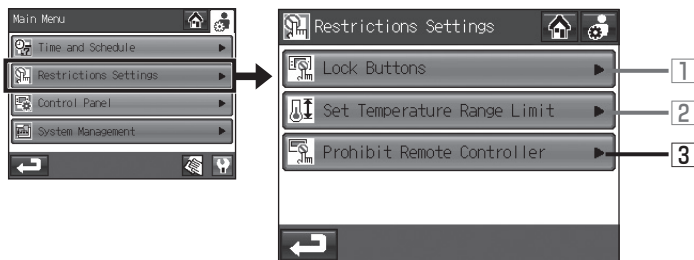
6. Touch the ⑤ **OK** button to save the settings.

- The temperature setting range and the operation mode that can be set depend on the indoor unit and remote controller models.
- Operation from the local remote controllers that are connected to Mr. SLIM® cannot be prohibited from the TC-24A. Use the button lock function on the controllers instead.
- If the temperature limits are set too high or low, the system changeover function may not work properly and the units may not operate in the expected mode (Cooling or Heating).
When using the system changeover function, it is recommended not to use the temperature range limit function.

Usage - Main Menu Settings

2 Restrictions Settings (cont'd)

Main Menu > Restrictions Settings



Main Menu > Restrictions Settings > Prohibit Remote Controller

3 Locking or unlocking access to the ON/OFF, Mode, Set Temperature, and Filter Sign Reset settings from the local and other system controllers.

① **Show Group Name List** button
Displays a list of group names in a pop-up window.

② **Group** buttons
Displays group numbers. Touch the button for a specific group to edit its settings.

Select All button
Selects all groups.

③ **Edit** button
Edits the temperature range for the selected group.

▲▼ buttons
Use to flip through the pages. (Each page lists four groups.)

- When access to specific settings are locked, will appear over the corresponding icons.
- The settings that can be locked or unlocked depend on the type of group.

	Indoor unit groups	LOSSNAY groups
① ON/OFF	○	○
② Mode	○	×
③ Set temperature	○	×
④ Filter Sign reset	○	○

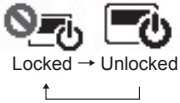
1. Touch the **3 Prohibit Remote Controller** button on the [Restrictions Settings].
2. Read the pop-up message, and touch the **OK** button to confirm.

3. Click on the ② **Group** button on the [Prohibit Remote Controller] screen to select the groups and change their settings.
4. Touch the ③ **Edit** button.
5. Use the buttons labeled ④ in the pop-up window at right to lock or unlock access to each item.
6. Touch the ⑤ **OK** button to save the settings.



- The local remote controllers will be disabled in the groups whose HOLD function is activated. When the HOLD function is activated, the operation prohibit settings cannot be changed from this screen.
- The screen shown left will always display the latest prohibit/permit status. If an event takes place that changes the prohibit/permit status of a specific item, the screen display will be updated. (The mark will appear or disappear.)

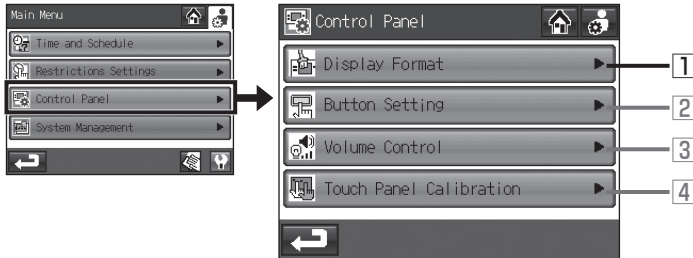
The display will change as follows every time the button is touched.



Usage - Main Menu Settings

3 Control Panel

Main Menu > Control Panel



Main Menu > Control Panel > Display Format

1 Setting the basic display settings on the HOME and MENU screens

Touch the 1 **Display Format** button on the [Control Panel] screen.

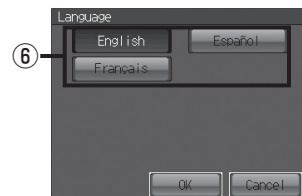
- The [Display Format] screen consists of three pages (1/3 - 3/3). Use the 4 (▼) (▲) buttons to flip through the pages. After setting all the settings, touch the 5 **Save** button.

Display Format screen : 1/3



To select the display language

1. Touch the 1 **Language** button on the [Display Format] screen (1/3).
2. Select a desired language from the language options (buttons labeled 6 in the figure) on the pop-up screen.
3. Press the **OK** button to return to the previous screen.



To select the temperature unit

Touch the 2 **Temperature unit** button on the [Display Format] screen (1/3) to switch between °C and °F.



To show or hide the room temperature

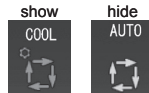
Touch the ③ **Room Temperature** button on the [Display Format] screen (1/3) to switch between **Show** and **Hide**.

Display Format screen: 2/3



To show or hide the Cooling/Heating mode icon (during Auto mode) when the operation mode is enabled

Touch the ⑦ **Automatic Mode Display Setting** button to switch between Show () and Hide (). Sample [HOME] screen.



To set the backlight timeout time

Touch the ⑧ **Backlight timeout setting** button to set the timeout time.

The back light will go off after a specified time of non-use.

* Touch the button repeatedly to select from the following settings.

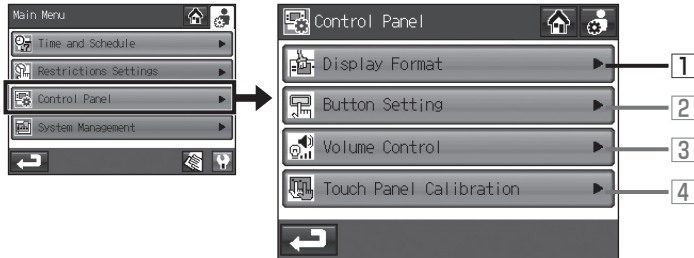
1 min. → 3 min. → 5 min. → 7 min. → 10 min.

The backlight will remain lit as long as an error exists.

Usage - Main Menu Settings

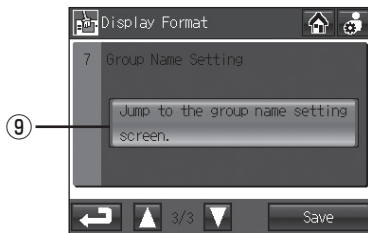
3 Control Panel (cont'd)

Main Menu >Control Panel



Main Menu > Control Panel > Display Format

Display Format screen : 3/3



Group Name Setting screen

To change the group name

1. Touch the ⑨ **Jump to the group name setting screen** button on the [Display Format] screen (3/3).
2. Select a desired group from the buttons labeled ⑩ on the [Group Name Setting] screen to change its group name.
3. Enter the group name on the pop-up window. (Refer to the next page for details.) Group names can be copied and pasted by using the ⑪ **Copy** and ⑫ **Paste** buttons.
4. Touch the ⑤ **Save** button.

Character input screen



To enter character strings such as group names (maximum 16 characters), perform the following procedure.

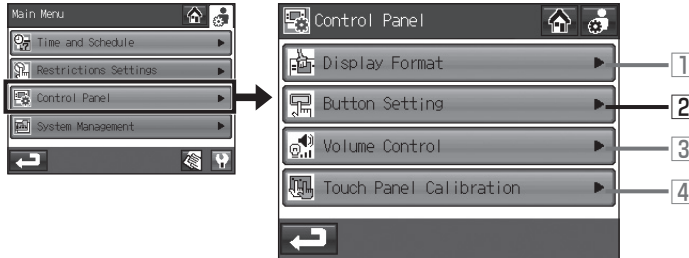
To enter a character string

1. Touch ① [ABC], [abc], or [1 ()] to select upper case alphabets, lower case alphabets, or numerical and other symbols.
2. Enter characters from the ② keyboard.
 - *Scroll the screen up and down with the ③ ▼▲ buttons to see all characters.
 - *To correct a character, move the cursor over the character with the ④ ◀▶ button, and then either delete it with the ⑤ **DELETE** button or overwrite it with a new character.
3. When complete, touch the ⑥ **OK** button to return to the previous screen.

Usage - Main Menu Settings

3 Control Panel (cont'd)

Main Menu > Control Panel



Main Menu > Control Panel > Button Settings

2 Controller button settings



To select the groups on which to execute the SET BACK function

1. Touch the ① **Setback Button Setting** button on the [Button Setting] screen.
2. Read the pop-up message, and touch the **OK** button to confirm.
3. Touch the ⑤ ▼▲ buttons to set the upper and lower limits. Press the button labeled ⑧ to set different ranges for different groups. The groups whose temperature setting is different from the one for the collective setting will appear underlined G10.
4. Select the groups to include from the Group buttons labeled ⑥. By default, all groups are selected.
5. Touch the ⑦ **Save** button.

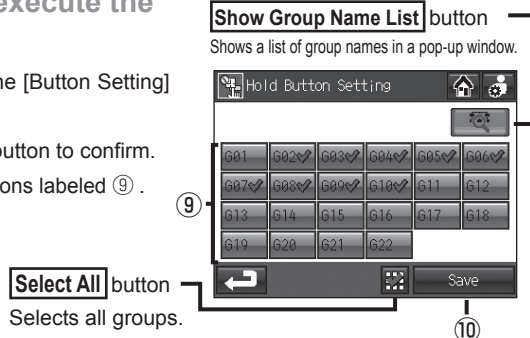


Select All button
Selects all groups.

- The minimum difference between the upper and lower limits is 4°C (8°F).
- The temperature range that can be set depends on the connected units.
- The groups that do not support the Setback function cannot be selected.
- If you change the settings while the SETBACK button is ON, turn off the SETBACK button, and then turn it back on to reflect the changes.

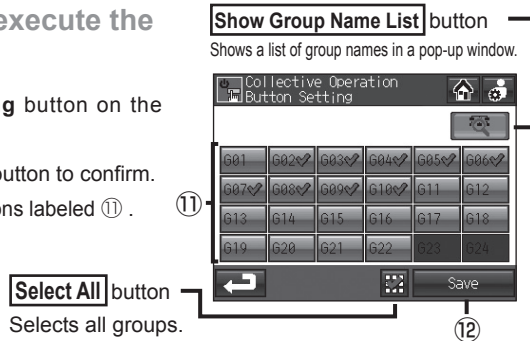
To select the groups on which to execute the HOLD function

1. Touch the ② **Hold Button Setting** button on the [Button Setting] screen.
2. Read the pop-up message, and touch the **OK** button to confirm.
3. Select the groups to include from the Group buttons labeled ⑨ .
By default, all groups are selected.
4. Touch the ⑩ **Save** button.



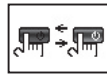
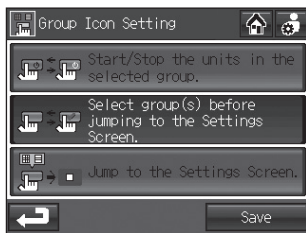
To select the groups on which to execute the Collective ON/OFF function

1. Touch the ③ **Collective Operation Setting** button on the [Button Setting] screen.
2. Read the pop-up message, and touch the **OK** button to confirm.
3. Select the groups to include from the Group buttons labeled ⑪ .
By default, all groups are selected.
4. Touch the ⑫ **Save** button.



• The DIDO controller groups that do not support the Collective ON/OFF function cannot be selected.

To assign an operation mode to the Group icon on the [HOME] screen.



Operation mode 1

Stops or starts the operation of the specific group of units when the Group icon is touched.



Operation mode 2 (default)

Allows the user to select multiple groups before jumping to the Group screen. Touch the **operate** button after selecting groups to jump to the Group screen.



Operation mode 3

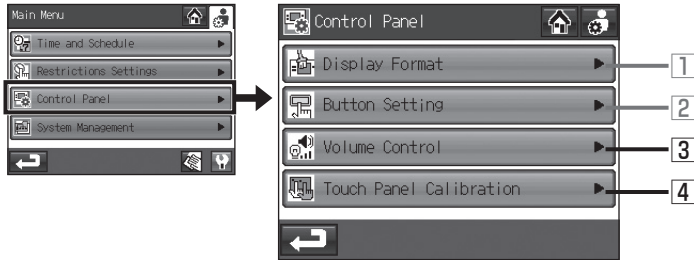
Jumps to the Group screen when a Group icon is touched.

1. Touch the ④ **Group Icon Setting** button on the [Button Setting] screen.
2. Select among Operation mode 1, Operation mode 2, and Operation mode 3 by touching the corresponding button labeled ⑬ .
3. Touch the ⑭ **Save** button.

Usage - Main Menu Settings

3 Control Panel (cont'd)

Main Menu >Control Panel



Main Menu > Control Panel > Volume Control

3 Adjusting the volume and brightness

Touch the 3 **Volume Control** button on the [Control Panel] screen.



To adjust the volume

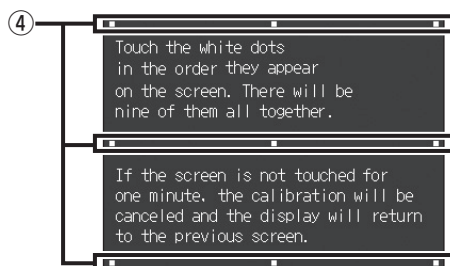
1. Touch the ① **Sound** button on the [Volume Control] screen.
Every time the ① **Sound** button is touched, the sound level changes as follows: [Level 0] → [Level 1] → [Level 2] → [Level 3].
2. Touch the ③ **Save** button.

To adjust the brightness

1. Touch the ② **Brightness** button on the [Volume Control] screen.
Every time the ② **Brightness** button is touched, the brightness level changes as follows: [70%] → [80%] → [90%] → [100%].
2. Touch the ③ **Save** button.

• The volume and brightness settings will be changed immediately, but will not be saved until the ③ **Save** button is touched.

4 Calibrating the touch panel



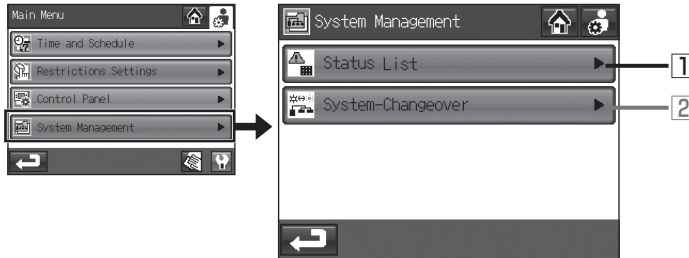
1. Touch the **4** **Touch Panel Calibration** button on the [Control Panel] screen.
Touch the **OK** button on the confirmation screen.
2. Touch the white squares (**4**) in the order they appear, starting from the top left corner.
3. After all nine squares are touched, the screen will return to the [Control Panel] screen.

- If each square is not touched within one minute after the last square is touched, calibration will be cancelled and the screen will return to the [Control Panel] screen.
 - To calibrate the screen properly, use a pointy, but not sharp, object to touch the squares.
- * Sharp objects may scratch the touch panel.

Usage - Main Menu Settings

4 System Management

Main Menu > System Management



Main Menu > System Management > Status List

1 Checking or resetting the Error or Filter Sign

Touch the ① **Status List** button on the [System management] screen.

Number of errors
Displays the number of errors.

Group names
Displays the name of the group that includes the unit whose Error/Filter Signs are turned on.
* The name of DIDO controller groups will not be displayed.

No.	Group Name	address	error code
1	LIVING ROOM	001	6607
2	DINING ROOM	002	6607
3	ENTRANCE	003	6607

Error source address
Displays the M-NET address of the units whose Error/Filter Signs are turned on.

Error code
Displays the code for the error that were detected.

② All Reset

To check the error

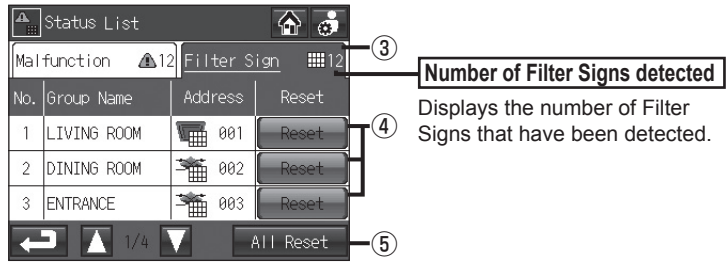
1. Touch the ① [Malfunction] tab to check the number of errors, the names of the group in which the errors occurred, the addresses of the error-source units, and the error codes.

• If an error occurs, note the error code and consult your dealer or a maintenance provider.

To reset the error

1. Touch the ① [Malfunction] tab.
2. Touch the ② **All Reset** button.
3. Touch the **OK** button on the pop-up window.

• Those groups whose errors have been reset will have an icon indicating that they are stopped.



To check the information about the units whose Filter Signs are turned on

1. Touch the ③ [Filter Sign] tab, and check the number of units whose Filter Signs are turned on, the names of the groups they belong to, and their addresses.

- When a Filter Sign appears, clean, wash, or replace the filter as necessary. Refer to air conditioner or LOSSNAY manual for details.

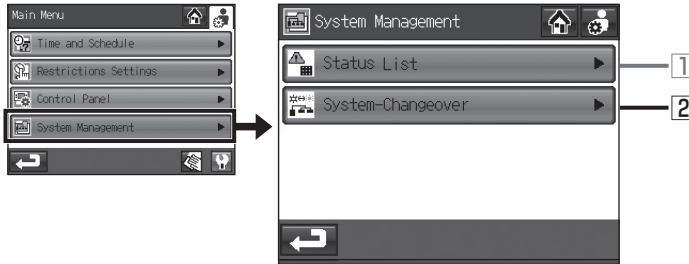
To reset the Filter Sign after cleaning the filter

- ④ **Reset** button : Clears the specific Filter Sign.
- ⑤ **All Reset** button : Clears all Filter Signs.

Usage - Main Menu Settings

4 System Management (cont'd)

Main Menu > System Management



Main Menu > System Management > System-changeover

2 Using the System-Changeover function

Use the System-Changeover mode to automatically change a group of indoor units that are connected to the same outdoor unit over between the Cooling and Heating modes according to temperature changes.

Use this function to control the indoor units that do not have an automatic changeover mode. They can be operated in the Heating mode in the morning, and then automatically changed over to the Cooling or Heating mode all at once in the afternoon, for example, without the need to manually change the mode via each remote controller.

* This function should not be used in conjunction with the System-Changeover function on the outdoor unit or other system controllers.


* When the System-Changeover mode is set to [Auto], the operation mode is selected based on the demands of the majority of the group, taking into consideration the capacity of each indoor unit. When it is set to [Representative Group], the operation mode is selected based on the demand of the representative group through updating its status every 15 minutes and changing over to the cooling or heating mode as necessary.


Because the operation mode is selected based on the demands of the representative group or of the majority of the groups, not all areas may be air conditioned to the optimum temperature.

- If the temperature limits are set too high or low (see page 38), the system changeover function may not work properly and the units may not operate in the expected mode (Cooling or Heating).
- The system changeover function is not available for the following types of products: Simultaneous Cooling/Heating units (with Auto mode), Mr. SLIM, LOSSNAY, and DIDO controller.

Operation mode

Displays the current operation mode

Cooling:  Cool

Heating:  Heat

Block No.

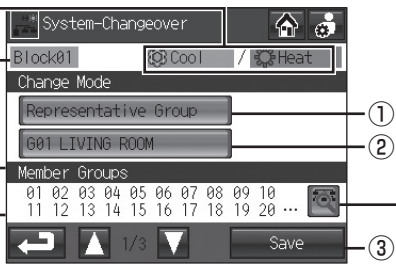
Displays the block number. All units in each group are operated in the same operation mode. The TC-24A automatically creates blocks based on the refrigerant pipe connection information and the group setting information on each unit.

Group list

Displays the number assigned to the indoor unit groups that are connected to the outdoor units in a specific block. Select a representative group from this list when the [Representative Group] is selected for the System-Changeover mode.

Display Block Information button

Displays the addresses of the outdoor units and the names of the groups in a specific block.



1. Touch the **2** **System-Changeover** button on the [System management] screen.
2. Touch the **1** **Change mode** button to select between [None], [Auto], and [Representative Group].

System-changeover mode	Setting
None (default)	Select this option so as not to use the System-Changeover function.
Auto	The operation modes (cooling/heating) will be changed-over based on the following: Temperature differences between the preset temperature and the room temperature of all indoor unit groups that are connected to a specific outdoor unit, AND the capacity of each indoor unit in each group. * The operation mode of the groups of units that are not operating, or the ones that are operating in the Fan or Auto mode, will remain the same.
Representative Group	The operation modes (Cooling/Heating) will be changed-over based on the temperature difference between the preset temperature of the representative group and the room temperature. * When the air conditioning units in the Representative Group are not operating, or they are operating in the Fan or Auto mode, the system-changeover function will work in the same way as when the system-changeover mode is set to Auto.

When [Representative Group] is selected, the group that is currently designated as the Representative Group will be displayed.

* To designate a different group as the Representative Group, select a new group on the screen that appears (shown right) when the **2** **Representative Group** button is pressed, and then touch the **OK** button.

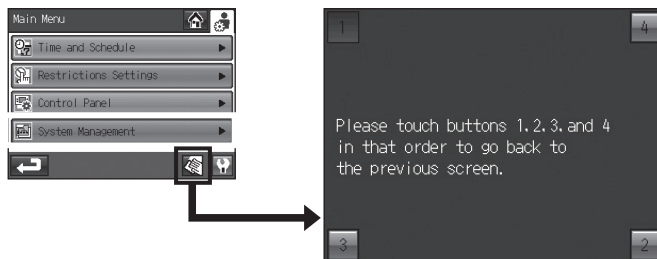


• The initial setting for the Representative Group is the group in a specific block with the smallest group number.

3. Save the **3** **Save** button on the [System-Changeover] screen.


Maintenance

Touch Panel Cleaning screen



To clean the touch panel

This screen allows the user to wipe the touch screen without accidentally changing the settings.

1. Touch the  icon on the [Main menu] screen to bring up the screen shown above.
2. When done cleaning the touch panel, touch the four numbers in the corners 1, 2, 3, and 4 in that order to return to the [Main Menu] screen.

- The four numbers must be touched in the correct order. If you touch the numbers in the wrong order, start over from 1.
- Wipe with a soft dry cloth, a cloth soaked in water with mild detergent, or a cloth dampened with ethanol. Do not use acidic, alkaline, or organic solvents.

Troubleshooting

Problem

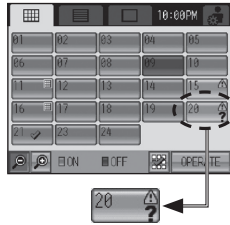
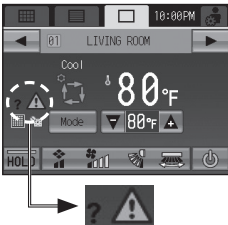
The LED on the Collective ON/OFF button is blinking.

Solution

Touch Main Menu > System Management > Status List. ON the Malfunction tab, check the error code and the error source address on the screen, and consult your dealer. Refer to page 50.

Problem

⚠️ is displayed on the screen.

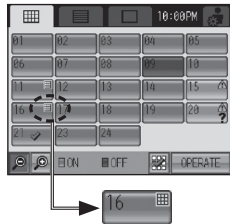
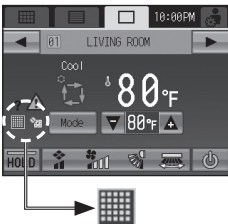


Solution

Touch Main Menu > System Management > Status List. ON the Malfunction tab, check the error code and the error source address on the screen, and consult your dealer. Refer to page 50.

Problem

A Filter Sign is displayed on the screen.

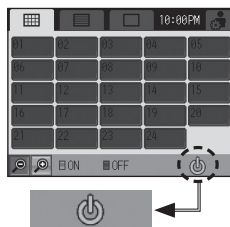


Solution

Touch Main Menu > System Management > Status List. ON the Filter Sign tab, check the address on the screen. Clean the filter on the unit whose Filter Sign is on according to the instructions in the manual for the applicable unit. Refer to page 50.

Problem

[Emergency Stop (Level signal)] is displayed on the screen, and the controller does not respond to the **ON/OFF** button.



If the external input interface receives an emergency stop signal, all indoor units and the LOSSNAY that are controlled by the TC-24A will stop. The TC-24A controller, low-level system controllers, or local remote controllers will not respond until the emergency stop signal input is removed. When the emergency stop signal is removed, the operation status before the signal was received will be restored.

Specifications		
Power source	30VDC *1 (for connection to M-NET only)	Receives power from the power supply unit for transmission line or from outdoor units via the M-NET transmission cable. The power consumption coefficient*2 of Touch Controller is "4."
Operating conditions	Temperature	Operating temperature range 0~40°C [32°F~104°F] Storage temperature range -20~+70°C [-4°F~+158°F]
	Humidity	30%~90%RH (Non-condensing)
Weight	0.5kg [1-1/8 lbs]	
External dimensions (W x H x D)	180 x 120 x 30 mm 7-3/32 x 4-23/32 x 1-3/16 in	

*1 Not for use with a generic DC power supply device. Use the power supply unit for transmission line (PAC-SC51KUA etc.) by Mitsubishi.

*2 "Power consumption Coefficient" is a coefficient to calculate the relative power consumption of the devices that receive power through the M-NET transmission line.

Refer to the note at the end of Chapter 4 "System diagram" in the Installation Manual.

 **MITSUBISHI ELECTRIC CORPORATION**

HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN

WT05827X01